

CLAIMS

1. Process for ink dispensing, of the type that comprise supplying ink in a container, and the container having a dispensing system, that comprises a tank
5 where doses of ink are poured, characterized in that it comprises the steps of:
supplying the ink in a container with deformable walls, provided with container opening means;
supporting the full or partially full container in the dispensing system;
opening the container using the opening means, determining an opening;
10 and
exerting pressure, using pressure and flattening means, against the container walls, against said opening,
so that the combined action of compression pushes the ink contained in the container, thanks to the possibility of deforming the container walls, by the flattening
15 thereof, against the opening, whereby a dose of ink exits.
2. Process according to claim 1, characterized in that the step of exerting pressure is performed for a predetermined time, said ink dose being in accordance with said predetermined time.
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3. Process according to claim 2, characterized in that it comprises a dispensing time control step, wherein said predetermined time is controlled by control means.
4. Process according to claim 3, characterized in that said time control step
25 comprises the measuring of the weight that exits the outlet.
5. Process according to claim 3, characterized in that said time control step comprises measuring the height, in the tank, of the dispensed fluid of the dose which exits the outlet.
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6. Process according to any one of the preceding claims, characterized in that said outlet is fixed, in the dispensing system, in a lower position, and said pressure is exerted downwards against the deformable walls of the container.
- 35 7. Process according to any one of the preceding claims, characterized in that

the step of exerting pressure comprises exerting pressure using a manual plunger and/or lever.

8. Process according to any one of claims 1 to 7, characterized in that the step
5 of exerting pressure comprises exerting pressure by the action of at least two antagonistic cylinders which are displaced vertically downwards against the container walls.
9. Process according to any one of claims 1 to 7, characterized in that the step
10 of exerting pressure comprises exerting pressure using at least one cylinder which is simultaneously vertically displaced downwards against the deformable walls of the container and against a fixed, non-deformable wall of the dispensing system.
10. Process according to any one of claims 1 to 7, characterized in that the step
15 of exerting pressure comprises simultaneously exerting pressure against the deformable walls of the container and against a fixed, non-deformable wall of the dispensing system, using a handle of a connecting rod-handle mechanism actuated by a plunger.
- 20 11. Container for ink dispensing, to be used in a process according to any of the preceding claims, characterized in that its walls are deformable.
12. Container according to claim 11, characterized in that it comprises an outlet
25 for the ink contained to be dispensed.
13. Container according to claim 12, characterized in that it comprises outlet-opening means.
14. Container according to claim 13, characterized in that said opening means
30 comprise a cap.
15. Container according to claim 13, characterized in that said opening means
comprise a "push-pull" type device, wherein when the element which surrounds the outlet is pulled, it opens, closing when said element is pressed.

16. Container according to any of claims 11 to 15, characterized in that it comprises coupling means of the outlet to the fixed part of the dispensing system.

17. Container according to any of claims 11 to 15, characterized in that said opening means comprise a lower valve, whose valve body comprises an inner space which connects to the inside of the container, the valve sealing element being a cap, displaceable between a position of maximum opening and a closed position, wherein the larger base of the seal is essentially level with the valve outlet, closing the container.

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18. Container according to claim 17, characterized in that said sealing element is joined to an actuating rod which runs inside said inner cylindrical space of the valve body and is actuated in turn by a tappet, against the action of a spring.

19. Ink dispensing device, for the implementation of a process according to any of claims 1 to 10 and to be used in conjunction with a container according to any of claims 11 to 18, of the type of devices that comprise support means for the ink container, ink dispensing means and a tank wherein doses of ink are poured from the ink container, characterized in that it comprises container outlet opening means, and in that the ink dispensing means comprise means for exerting pressure against the deformable walls of the container, against said container outlet, so that the combined action of compression pushes the ink contained in the container, thanks to the possibility of deforming the deformable walls of the container, by the flattening thereof, against the opening, whereby doses of ink exit towards said tank.

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20. Device according to claim 19, characterized in that it comprises operating time control means for the pressure and flattening means on the container.

21. Device according to claim 20, characterized in that said control means comprise means for measuring the weight of the ink dose which exits the container outlet.

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22. Device according to claims 20 or 21, characterized in that said control means comprise height-measuring means, in the tank, of the fluid dispensed of the dose that exits the outlet.

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23. Device according to any one of claims 19 to 22, characterized in that the opening means are arranged in lower position, and the pressure and flattening means are adapted for exerting pressure downwards against the deformable walls of the container.

24. Device according to any one of claims 19 to 23, characterized in that said pressure and flattening means comprise a plunger which acts on deforming the container against the opening.

25. Device according to any one of claims 19 to 23, characterized in that said pressure and flattening means comprise at least two antagonistic cylinders that are displaced vertically and in parallel to one another against the deformable walls of the container and against the opening.

26. Device according to any one of claims 19 to 23, characterized in that said pressure and flattening means comprise at least a cylinder which is simultaneously displaced downwards against the deformable walls of the container, against a fixed, non-deformable wall of the dispensing system and against the opening.

27. Device according to any one of claims 19 to 23, characterized in that said pressure and flattening means comprise a handle of a connecting rod-handle mechanism actuated by a plunger, adapted for simultaneously exerting pressure against the deformable walls of the container, against a fixed, non-deformable wall of the dispensing system and against the opening.

28. Device according to any one of claims 19 to 23, characterized in that said pressure and flattening means comprise a plate, actuated by at least a cylinder, which exerts pressure simultaneously and perpendicularly against the deformable walls of the container and against a fixed, non-deformable wall of the dispensing system.